Abstract

Fungicidal mixtures, comprising as active components

a) a morpholine or piperidine derivative I selected from the group of the compounds Ia, Ib, Ic and Id

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$$(H_3C)_3C \longrightarrow CH_2-CH(CH_3)-CH_2 - N$$
 CH₃ CH₃

$$(H_3C)_3C$$
 \longrightarrow $CH_2-CH(CH_3)-CH_2-N$ (Ib)

$$H_3C-(C_nH_{2n})-N O$$
(Ic)

[n=10,11,12 (60 - 70%) or 13]

and

b) compounds of the formula II

$$X^{2}$$

$$X^{3}$$

$$X^{4}$$

$$N$$

$$R^{3}$$

$$R^{4}$$

$$(II)$$

334



where the substituents X^1 to X^5 and R^1 to R^4 ar as defined below:

- X^1 is C_1-C_4 -haloalkyl, C_1-C_4 -haloalkoxy or halogen;
- 5 X^2 to X^5 are, independently of one another, hydrogen, halogen, $C_1-C_4-alkyl$, $C_1-C_4-haloalkyl$, $C_1-C_4-alkoxy$ or $C_1-C_4-haloalkoxy$;
- is $C_1-C_4-alkyl$, $C_2-C_6-alkenyl$, $C_2-C_6-alkynyl$, $C_1-C_4-alkyl-C_3-C_7-cycloalkyl$, $C_1-C_4-alkyl-C_3-C_7-cycloalkenyl$,

 where these radicals may carry substituents selected from the group consisting of halogen, cyano and $C_1-C_4-alkoxy$,
- is a phenyl radical or a 5- or 6-membered saturated or unsaturated heterocyclyl radical having at least one heteroatom selected from the group consisting of N, O and S, where the cyclic radicals may have one to three substituents selected from the group consisting of halogen, C₁-C₄-alkoxy, C₁-C₄-haloalkyl, C₁-C₄-haloalkoxy, C₁-C₄-alkoxy-C₂-C₄-alkoxy-C₄-alkoxy-C₂-C₄-alkoxy-C₂-C₄-alkoxy-C₂-C₄-alkoxy-C₂-C₄-
 - R^3 and R^4 are, independently of one another, hydrogen, $C_1-C_4-alkyl,\ C_1-C_4-alkoxy,\ C_1-C_4-alkylthio, \\ N-C_1-C_4-alkylamino,\ C_1-C_4-haloalkyl\ or\ C_1-C_4-haloalkoxy$
- in a synergistically effective amount are described.

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